REMARKS

Applicant respectfully requests the consideration of the following remarks and the reconsideration of the application.

Claims 1-120 were rejected under 35 U.S.C. 103(a) as being obvious over Guedalia (U.S. Patent 6,356,283) in view of Yamakado (U.S. Patent 6,014,133). Applicant respectfully disagrees.

A *prima facie* case of obviousness is established by presenting evidence that *would have led* one of ordinary skill in the art to combine the relevant teaching of the references to arrive at the claimed invention. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. In *re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicant respectfully submits that the teaching of Guedalia and Yamakado *would not have led* one of ordinary skill in the art to combine the relevant teaching of the references to arrive at the claimed invention. Applicant respectfully submits that the system of Guedalia is vastly different from the system of Yamakado such that it is not clear how the systems of Guedalia and Yamakado might be combined to have a working system, with a reasonable expectation of success.

The system of Yamakado transmits the _screen image_ of a host computer to a terminal computer for display. The screen image is the image displayed on the screen (e.g., screen 4 in Figure 2, the display device) of the host computer. The terminal computer of Yamakado is used to show what is displayed on _the screen_ of the host computer (see, e.g., Col. 11, lines 31-39, Yamakado).

Guedalia teaches the client/server architecture for the viewing of large images through the use of a web site on the server computer and Internet browsers on the client computers, since the full resolution image may not fit within a view window on a computer monitor (see, e.g., Col. 16, lines 35-39, Guedalia). The system of Guedalia uses _a web server_ to provide a user interface for a client computer to access image data archived on the server computer. Different web pages are received and displayed dynamically according to the user interaction with the image maps embedded in the web pages so that the user may selectively access the image data archived on the server (see, e.g., Col. 19, lines 35-67, Guedalia). A _key feature_ of Guedalia is to use an Internet browser, not a special client software program, in accessing the image data through the web server in the form of HTML pages (see, e.g., Col. 4, lines 52-62, Guedalia). The Internet browser resident on the client computer of Guedalia renders the HTML pages for display on the client computer. Thus, Guedalia teaches a system with a server computer and a client computer; through the web server the server computer provides HTML pages to the client computer for the access of the archived image data; and in the Internet browser the client computer renders and displays the HTML pages with image maps to provide a user interface to access the archived image data.

Thus, the system of Guedalia and the system of Yamakado are generally not compatible. Guedalia teaches to use a web server to serve the client computer. Yamakado teaches to send the screen image of the host computer for display on the terminal computers. Applicant does not see a meaningful combination of Guedalia and Yamakado.

It is understood that typically an HTML page contains information specifying the content of the page, not the exact image of the page. An Internet browser is used to render the HTML page into a suitable form for display on the client computer. Different browsers on a same computer platform or different computer platforms may render the same HTML page into images of different appearances, depending on the size of the browser window, the user preferences (e.g., fonts, colors), the internal policies of the browser programs in rendering various elements (e.g., the look and feel of buttons and text entries), and the capabilities of the browser programs in supporting various features. For example, a Netscape Navigator and a Microsoft Internet Explorer may render a text box of a web page differently. Good quality rendering of a web page typically requests a sophisticated software program and a powerful processor.

The Office Action asserted that "It would have been obvious to one skilled in the art at the time the invention was made to include the ability to make the entire browser data of Guedalia to become an image as bit mapped data as taught by Yamakado." Applicant respectfully submits that such an assertion is confusing in view of the disclosure of Guedalia and Yamakado. It is not clear what the term "entire browser data of Guedalia" refers to. In Guedalia, the Internet browser runs on the client computer, which renders the HTML page for display. It does not make sense to refer to the HTML pages received in the Internet browser on the client computer as the "browser data of Guedalia", since it is already displayed in the Internet browser on the client computer. Since Yamakado teaches to access the host computer's screen image, the suggestion of the Office Action is considered as using the method of Yamakado to view the screen image of the server compute of Guedalia, which runs the web server. However, a web server _does not_ show the web pages requested by the remote clients on the screen of the server computer. Thus, it is not clear what is the "entire browser data of Guedalia".

Further, Yamakado does not disclose converting the *entire* browser data into bit mapped data. Yamakado does not have a description of browsers and browser data. The screen image does not generally correspond to any particular data. The screen image is what appears on the display device of the host computer. The size of a screen is typically smaller than a web page. Since the web page does not fit entirely within a screen, the screen image of Yamakado cannot be the image converted from the entire browser data.

From the description of Guedalia and Yamakado, it is not clear why one might want to use the teaching of Yamakado to view the screen image of the server computer that runs a web server. In the system of Guedalia, the client computers access the image data archived on the server computer through the web server, not the screen image of the server computer. A web server typically runs without displaying anything on the screen of the server computer. Thus, the screen image of the server computer would not show the web pages that are served by the web server. If the methods of Yamakado were used to access the screen image of the server computer, the client computer would see the screen image of the server computer *unrelated* to the web pages served by the web page. Thus, in such a combination, the methods of Guedalia and Yamakado are implemented on the same computers but completely independent from each other. Thus, it would not be appropriate to mix the features of Guedalia and Yamakado in rejecting the claims.

For example, if the teaching of Yamakado were used to view the screen image of the server computer of Guedalia, the client computer would not be accessing the HTML pages from the web server using the Internet browser; the teaching of Guedalia regarding the web server and the Internet browser would be irrelevant. If the teaching of the Guedalia regarding the web server and the Internet browser were considered, transmitting the screen image of the host computer of Yamakado to a terminal computer would be irrelevant.

The Office Action indicated that "Guedalia does not explicitly disclose that a page that contains text and images to be made into only an image." Applicant would like to further point out that Guedalia do explicitly specify that pages sent from the server are HTML pages, which are clearly not images rendered from web pages including text and image in response to the request for the web pages from the client computers. The HTML pages require rendering for display.

Note that the Office Action relied heavily on the teaching of Guedalia related to a traditional Internet browser, such as Netscape Navigator and Microsoft Internet Explorer. Since a traditional Internet browser is used in general, and in Guedalia in particular, on the *client side but not on the server side* to render the HTML pages for display, such teaching are not applicable to the claims.

Further, the image information cached on the server computer of Guedalia is not the image of the web page that is rendered from the web page in response to the request for the web page. In Guedalia, the image information cached on the server computer is a part of the components of the web page requested by the Internet browser. The HTML page received in the Internet browser refers to the image information. The Internet browser renders the web page, as specified by the HTML page and the image information, for display on the client computer.

In one embodiment of the present invention, the server renders the web page into an image for the portable device so that the portable device does not need the sophisticated software programs and a powerful processor to render web pages. The portable device has the capability to scroll the entire image of the web page, which is rendered by the host computer for the portable device. The entire image of the web page can be scrolled under the exclusive control of the device after the entire image of the web page is downloaded from the host computer. However, in one embodiment, not the entire image is automatically

downloaded from the host computer to the device. For example, the user of the portable device may not want to view the entire image. Automatically downloading the portions of the image that the user may want to see while not downloading the other potions can save the communication cost and time (e.g., air time and server bandwidth are both saved). For example, when a web page is first visited, only a portion of the rendered image of the web page that is to be displayed in the device browser window is downloaded; and, other portions of the rendered image are downloaded when they are scrolled into the browser window. Information about the portions that have been downloaded is tracked so that each portion of the image is downloaded only once. The portions that have been downloaded can be scrolled repeatedly into and out of the device browser window on the device under the exclusive control of the device, without having to repeatedly download the same image data. In one embodiment, the portion of the image that has not been downloaded is first displayed in a white color before it is downloaded and displayed (see, for example, lines 12-20 on page 9 of the specification of the present application). Further, in one embodiment, information about the downloaded portions are stored so that image portions of frequently visited areas of the visited web pages can be *automatically* downloaded when the web pages are revisited; thus, when the user scrolls between these areas, the scrolling can be under the exclusive control of the device since the image data for these areas are already *automatically* downloaded onto the device. In one embodiment, when the user returns to a web page, the last visited area of a web page (e.g., a bottom portion of the image of the web page) is automatically shown in the device window.

Applicant respectfully submits that the cited references do not meet all the limitations as recited in the pending claims. For example, claim 1 recites:

1.   (currently amended) A system for viewing Internet content, the system comprising:

a portable device; and

a host computer coupled to the portable device through a
communication link;

wherein the host computer receives information defining a web page
from outside and <u>renders said information into an image of the
web page</u> in memory of the host computer <u>in response to a
request for the web page from the portable device,</u> <u>said
information including text and graphics;</u>

wherein a software program running on the device implements a
device browser window with icons which are fixed with
respect to a device browser window;

wherein the host computer reduces the color depth of a portion of the
image of the web page which portion is proportional to the size
of the device browser window, digitally compresses and
transmits the portion of the image of the web page to the
device, where the portion of the image of the web page is
decompressed and stored into a display memory on the device
for display;

wherein <u>the device</u> enables a user to scroll the image of the web page
inside the device browser window and <u>sends a message to the
host computer informing the host computer scrolling
operations occurred in the device browser;</u> and

wherein <u>when a part of the image of the web page is brought into the
device browser window but has not been sent to the device, the
part of the image of the web page is sent from the host
computer to the device.</u>

Guedalia and Yamakado do not show a server that renders a web page, including text and

graphics, into an image *in response to a request for the web page* from a remote device. In

Guedalia, the HTML page received in the Internet browser of the client computer defines the

web page; the HTML page is not an image rendered from a web page. The client computer, not the server computer, renders the HTML pages using the Internet browser (e.g., Netscape Navigator or Macrosoft Internet Explorer) (see, Col. 17, lines 39-48, Guedalia). The screen image of the server computer, as applied to Guedalia according to Yamakado, has nothing to do with the web pages severed by the web server and received in the Internet browser of the client computer. Thus, when the screen image of the server computer is considered, the client side software of Yamakado is relevant, in which case the teaching of the Internet browser and the web server of Guedalia would not be applicable.

The description of Col. 17, lines 63 – Col. 18, line 44, of Guedalia relates to server side processing of image data archived on the server. In response to the Internet browser of the client computer requesting for a web page to access the image data, the web server sends an HTML page to the Internet browser. The Internet browser renders the HTML page to show the viewing windows and the embedded images in the viewing window. The Internet browser renders the web page for display. Thus, the processing of image data of Guedalia described in Col. 17, lines 63 – Col. 18, line 44 cannot be considered as the processing of the image <u>rendered from the web page in response to a request for the web page</u> that includes text and graphics. The image data of Guedalia is not rendered from a web page from information including text and graphics in response to the request for the web page from the portable device.

Further, claim 1 recites "the device ... sends a message to the host computer informing the host computer <u>scrolling operations occurred in the device browser.</u>" It is understood that a traditional Internet browser does not send messages to the web server to inform the web server about the scrolling operations in the Internet browser. The disclosure of Guedalia (e.g., Figure 2, item 42, Col. 18, lines 58-64) does not suggest such a feature corresponding to this limitation.

Furthermore, claim 1 recites "when a part of the image of the web page is brought into the device browser window but has not been sent to the device, the part of the image of the web page is sent from the host computer to the device." For example, in one embodiment of the present invention, the downloading of sections of the image rendered from an entire web page at the server is controlled by the display activity. The image of the entire web page is typically larger than the display area available on the portable device for the display of the web page. A section of the image that is not viewed may not be downloaded. When the user of the portable device scrolls the image to a part that has not been received, the section to be displayed in sent from the host computer to the device. However, the description of Guedalia (Col. 18, lines 58-64) does not relate to this limitation.

Applicant respectfully submits that providing a user interface to access image data archived on the server through a web server and transmitting screen image of a host computer to a terminal computer are very different from rendering web pages for the remote devices. Guedalia and Yamakado do not meet each and every aspect of claim 1 at least for the above reasons. Thus, the teaching of Guedalia and Yamakado *would not have led* one of ordinary skill in the art to combine the relevant teaching of the references to arrive at the claimed invention.

Claims 2-9 depend from claim 1 to incorporate the limitations of claim 1. Thus, claims 2-9 are patentable over the cited references at least for the above reasons.

In one embodiment of the present invention, an image of an entire web page is transmitted to and stored on the portable device for display. Since the image is larger than a display area available on the portable device, only a portion or an area of the image is displayed at a time. A user of the portable device can scroll the image of the web page on the portable device to see different areas of the image. In one embodiment, when the user comes

back to the web page, the last area displayed for the image of the entire web page appears first. For example, claim 5 further recites:

5.   (previously presented) A system as claimed in claim 1 wherein
        information about the last area displayed in the device browser
        window is stored in memory on the device for the web page, wherein
        <u>upon returning to the web page, said last area displayed appears first in</u>
        <u>the device browser window.</u>

Applicant respectfully submits that Guedalia (Figure 4, Col. 18, lines 46-56) does not show any feature that corresponds to the limitation further recited in claim 5.

Regarding claims 6 and 7, as discussed earlier, image information as components of a web page does not correspond to "the image of the entire web page". Thus, the disclosure of Guedalia (Col. 17, line 63-44) for the preparation of the web page does not correspond the limitation further recited in claims 6 and 7.

Guedalia and Yamakado do not meet each and every aspect of claims 10, 31 and 52. For example, claims 10 recites:

10.   (previously presented) A method to view Internet content, the method
        comprising:
        sending from a device to a remote server a first request for a first web
            page;
        automatically receiving at the device from the remote server in a
            compressed format a first portion of a first image of the entire
            first web page;
        displaying, on a display of the device, at least a part of the first portion
            of the first image of the entire first web page;
        receiving, at the device, user input to display a second portion of the
            first image of the entire first web page;

> transmitting, from the device to the remote server, data indicating the
>> user input to display the second portion of the first image of the
>> entire first web page;
>
> receiving at the device from the remote server in a compressed format
>> the second portion of the first image of the entire first web page
>> only when the second portion of the first image has not been
>> transmitted from the remote server to the device;
>
> displaying the second portion of the first image of the entire first web
>> page on the display of the device;
>
> wherein the first and second portions of the first image of the entire
>> first web page are rendered at the remote server from
>> information defining the first web page; and
>
> wherein at least one of the first and second portions of the first image
>> is rendered at the remote server from information including
>> text.

The Office Action corresponded the description of Guedalia, Col. 19, line 50-67, to the limitations of "transmitting, from the device to the remote server, data indicating the user input to display the second portion of the first image of the entire first web page" and "receiving at the device from the remote server in a compressed format the second portion of the first image of the entire first web page only when the second portion of the first image has not been transmitted from the remote server to the device." However, Guedalia (Col. 19, line 60-64) show that a *new* HTML web page is created and sent to the Internet browser when the user clicks on the image in the view window of an HTML web page displayed in the Internet browser. The new HTML web page is not "a second portion of *the first image of the entire first web page*". Since the Internet browser renders the entire web page for display on the client computer of Guedalia, the client computer would not send messages to the web server when the user scrolls the web page to see different portions of the web page.

Further, the server of Guedalia does not render text and graphics into a portion of the image of the entire web page. The screen image of a server computer would not show the web pages severed by the web site. Thus, the teaching of Yamakado would not applicable to the claim limitations, as discussed above. Note that Yamakado does not teach to transmit the entire *browser* to the device as bit-mapped image data. There is no discussion of a browser in Yamakado.

Guedalia and Yamakado do not meet each and every aspect of claims 22, 43 and 64. For example, claim 22 recites:

22.   (previously presented) A method to serve Internet content, the method comprising:
receiving at a server from a remote device a first request for a first web page;
rendering a first portion of a first image of the entire first web page from information defining the first web page;
selectively transmitting from the server to the remote device in a compressed format the first portion of the first image of the entire first web page for display on a display of the remote device;
receiving, at the server from the remote device, data indicating user input to display a second portion of the first image of the entire first web page on the remote device;
rendering the second portion of the first image of the entire first web page from the information defining the first web page;
responsive to the data indicating the user input to display the second portion, transmitting from the server to the remote device in a compressed format the second portion of the first image of the entire first web page only when the second portion of the first

image has not been transmitted from the server to the remote device;

wherein <u>at least one of the first and second portions of the first image is rendered at the server from information including text</u>.

Although Guedalia (Col. 19, lines 50-67) teaches that the user clicks on the mouse and the position of the click is sent back to the server, such a click is using the image map capability of an Internet browser to request for a new web page (see, Col. 19, lines 35-39 and Col. 19, lines 60-64). Thus, the click on the image map is not "data indicating user input to display a second portion of *the first image of the entire first web page* on the remote device". Further, the server of Guedalia does not render text and graphics into a portion of the image of the entire web page. The screen image of a server computer would not show the web pages severed by the web site. Thus, the teaching of Yamakado would not applicable to the claim limitations related to the web pages, as discussed above.

Regarding to claim 12, Guedalia (Col. 19, lines 30-49) shows the use of image map capability of Internet browsers to request web pages to see the desired location of an image archived on the server. Thus, different HTML web pages are generated dynamically in accordance with the feedback from the image map supported by the Internet browsers to access the image archived on the server of Guedalia. A person skilled in the art understood that when an image map is activated through a mouse click, the click on the image is sent to the web server as a part of the request for a new web page. A request for a different web page cannot be considered as "the user input to display the second portion of the first image of the entire first web page."

Regarding to claim 14, the indication of the sub-region selected on the client computer in Guedalia is for the generation of the new web page on the server computer. It does not correspond to "the second portion of <u>the first image of the entire first web page</u>".

Guedalia and Yamakado do not meet each and every aspect of claims 73, 89 and 105. For example, claim 73 recites:

73.　(previously presented) A method to view Internet content, the method comprising:

sending from a device to a remote server a request for a web page;

receiving at the device from the remote server in a compressed format at least a portion of an image of the entire web page, <u>the portion of the image being rendered at the remote server from information including text</u>;

selectively displaying the portion of the image on a display of the device according to a user input to the device; and

<u>automatically displaying the portion of the image on the display of the device in response to a user input to return to the web page.</u>

Guedalia and Yamakado do not have a description that a selected portion of the image of the entire web page, which is rendered from information including text at the server, is automatically displayed when returning to the web page.

Guedalia and Yamakado do not meet each and every aspect of claims 78, 94 and 110. For example, claim 78 recites:

78.　(previously presented) A method to serve Internet content, the method comprising:

storing on a server information about a plurality of frequently visited locations of a web page for a remote device, <u>the plurality of frequently visited locations being identified through user inputs to the remote device</u>;

receiving at the server from the remote device a request for the web page;

rendering at least a portion of an image of the entire web page from information defining the web page, the portion of the image including the plurality of frequently visited locations;

transmitting in a compressed format the portion of the image from the server to the remote device in response to the request for the web page.

Guedalia and Yamakado do not disclose that a portion of *the image of the entire web page*, which portion includes the frequently visited locations *identified through user inputs to the remote device*, is rendered and sent in response to the request for the web page. Although Guedalia teaches to cache image data, there is no description of "the plurality of frequently visited locations being identified through user inputs to the remote device." Further, it is improper to consider the cached image data as corresponding to the frequently visited locations, since the image data are cached to avoid further processing.

Guedalia and Yamakado do not meet each and every aspect of claims 83, 99 and 115. For example, claim 83 recites:

83. (previously presented) A method to view Internet content, the method comprising:

sending from a device to a remote server a request for a web page;

receiving at the device from the remote server in a compressed format a plurality of portions of an image of the entire web page, the plurality of portions of the image being rendered at the remote server from information including text; and

storing on the device the plurality of portions of the image;

receiving a user input to the device to display an area of the image; and

displaying the area of the image according to the plurality of portions of the image stored on the device.
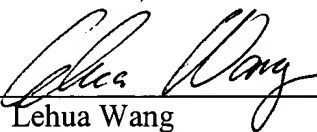
In Guedalia and Yamakado, the portion of the image sent to the client computer through the web server is not rendered from information including text at the server. The screen image of the server that runs a web server has nothing to do with web pages requested by the client computer.

Since dependent claims incorporate the limitations of the claims from which they depend, the pending claims 1-120 are patentable over Guedalia and Yamakado at least for the above reasons.

Please charge any shortages or credit any overages to Deposit Account No. 02-2666. Furthermore, if an extension is required, Applicant hereby requests such extension.

Respectfully submitted,

Dated: ___4/2?__, 2004   _____

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